



PROJECT OCEANOLOGY



Maintaining Homeostasis during an Arctic Expedition

Modified from an activity designed by Defence Dynamics (www.defencedynamics.mod.uk) and available through STEM Learning (www.stem.org.uk).

Listen to Polly explaining her grueling yet inspiring experiences during the expedition. Note that there are pauses in the audio – make sure you listen to the whole thing. In the table below, note any physical reactions or challenges she describes and the precautions or methods she used to deal with them. You will need to identify which homeostatic process is involved in her reaction and then write your notes in the corresponding row. When you are finished filling out the table, move on to the discussion questions on the back.

Homeostatic Process	Physical Reactions/Challenges <i>e.g. "I was shivering"</i>	Precautions and Preventions <i>e.g. "I wore layers to keep warm"</i>
Thermoregulation (temperature)		
Osmoregulation (water and ions)		
Glucoregulation (blood glucose level)		

